

**Mars Reconnaissance Orbiter
Preproposal Conference**

Science Review and Evaluation Process

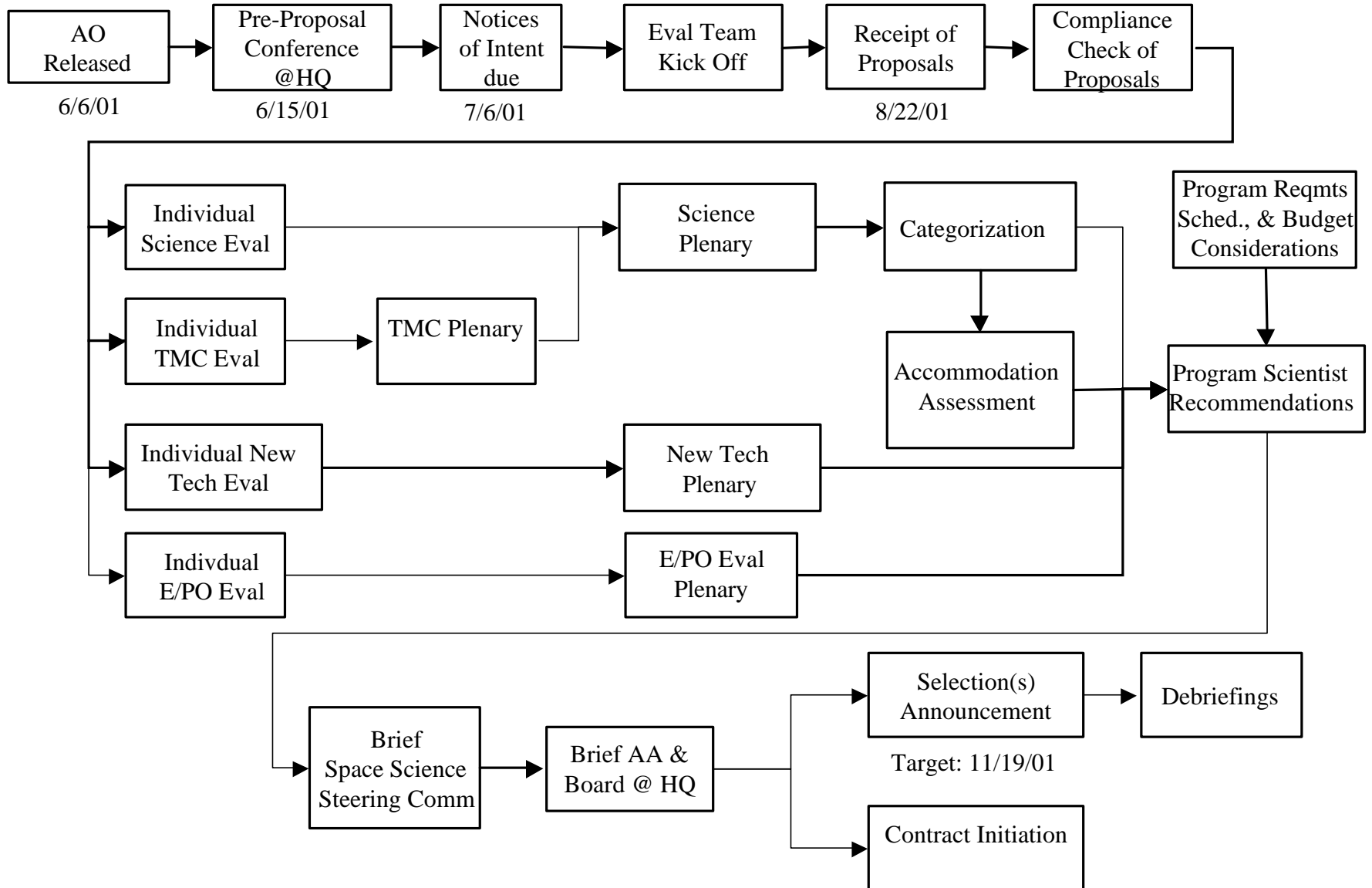
**Dr. Jim Garvin
June 15, 2001**

Science Proposal Evaluation Criteria

- **Evaluations for the two types of proposals, PI Instrument & Facility Team member**

| <u>PI Instrument & Facility Team</u> | |
|--|-----|
| -- Scientific Merit | 35% |
| -- Technical Merit & Feasibility | 30% |
| -- Implementation Risk | 20% |
| -- Competence & experience of Proposer | 15% |

Mars 05 Orbiter Proposal Review Process



Science Evaluation of Proposals

Science Evaluation

Evaluation Criteria:

-- Merit

- >> Must present traceability to scientific objectives (traceability analysis)
- >> Must show how investigation will provide significant impact on state of knowledge (sensitivity analysis)

-- Technical Merit & Feasibility

- >> Adequacy of investigation to address science objectives within Mission constraints
- >> Adequacy of science data analysis and archive plans
- >> Appropriateness of investigation to data supplied (Facility Team member)

-- Implementation Risk

- >> Cost realism & reasonableness; implementation approach (Facility Team member)

-- Competence & Experience of Proposer

- >> Ability to carry out the investigation to a successful conclusion

TMC Evaluation

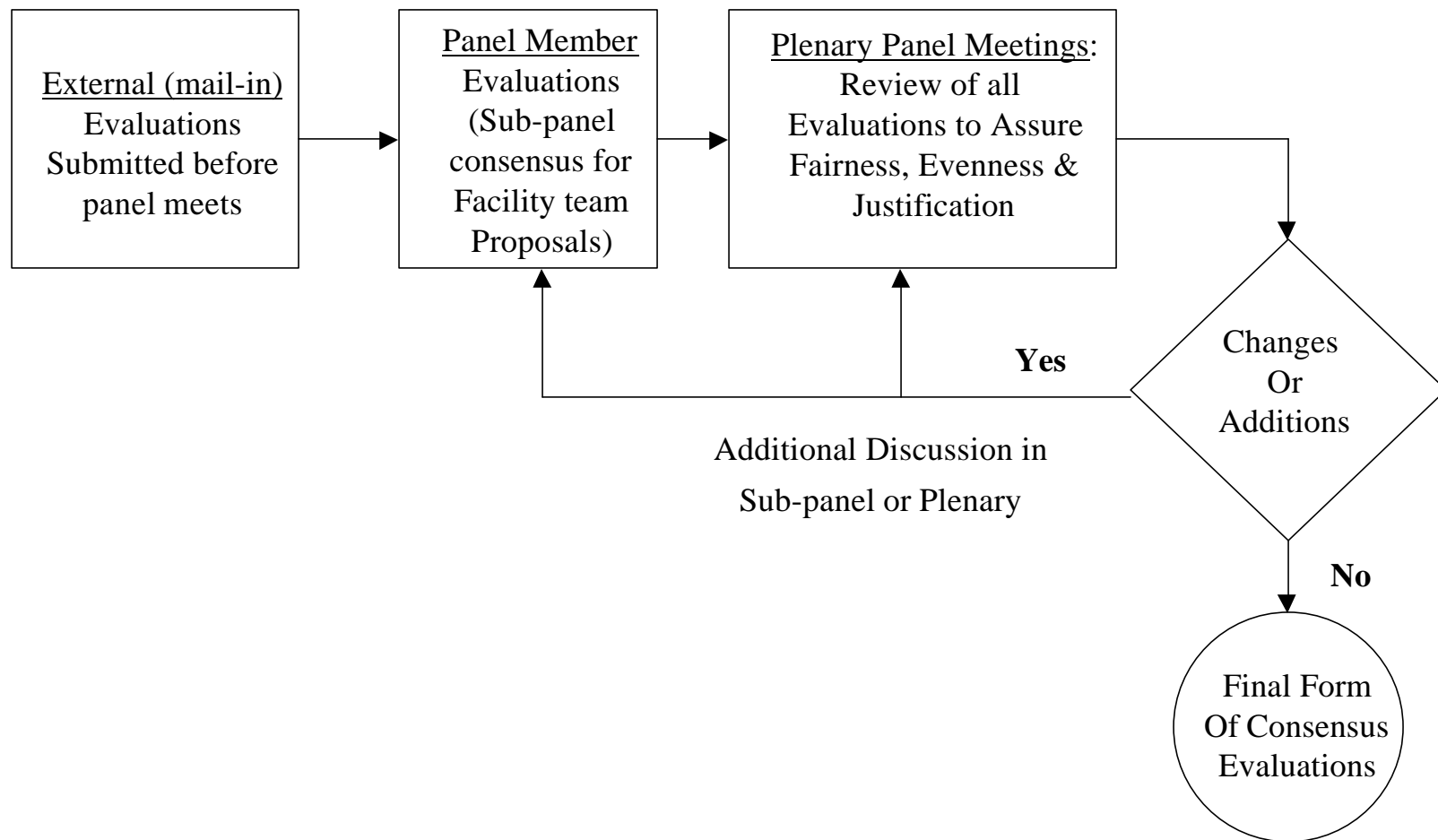
Evaluation Criteria:

-- Implementation Risk

- >> Cost realism & reasonableness; implementation approach (PI Instrument)

Science Review & Evaluation Process

- Science Evaluation Flow:



Science Review & Evaluation Process

- **Science Evaluators are:**

- Non-conflicted academic, contractor, consultant, and other government agency personnel available to support the review
- Peers in the areas of expertise they evaluate
- Additional, external reviewers for proposals needing a particular specialty. Provide written input, but do not participate in final ratings

- **Science Findings: Consensus of the entire panel**

- Every proposal evaluated by multiple reviewers with a mixture of discipline expertise
- All proposals and findings discussed by the entire panel
- Final ratings are agreed to in a plenary session
- Report documents strengths and weaknesses for the criteria